



# DoorProtect

## 1. FEATURES

Wireless sensor Ajax DoorProtect is designated for doors and windows opening detection. It functions as a part of Ajax security system.

## 2. SPECIFICATIONS

SPECIFICATION	MEANING
Sensor type	wireless
Assembling type	removable
Operating level	1 cm [0.4 in] [small magnet], 2 cm [0.8 in] [big magnet]
Uses	indoors
Socket to plug in the wire sensors	available
Tamper protection button	available
Radio signal power	20 mW
Radio-frequency range	868 MHz (Europe); 915 MHz (USA)
Maximum distance between sensor and central unit	2000 m (6562 ft) [open area]
Power supply	CR123A battery
Power supply voltage	3V
Battery life	Up to 7 years
Operation temperatures range	from 0°C (+32°F) to +50°C (+122°F)
Operation humidity	up to 80%
Dimensions	Ø20x90 mm (0.78x3.54 in)

## 3. COMPONENTS

DoorProtect opening detection sensor, magnet, external contact, battery CR123A, installation set, manual

## 4. SETTING-UP PROCEDURES

4.1 Before installing the sensor, it is required to register it with the Ajax security system. In order to register the sensor, it is necessary to switch the Ajax security system's receiver to «Add Device» mode (the receiver's manual explains how to accomplish it) and to put the switch «2» (PICTURE 3) on the sensor to the «0N» position. Sensor's light must blink at the moment of switching on. The registration request is transmitted at the moment the sensor is switched on only! In case the registration was not successful, switch off the sensor, wait for 5 seconds and switch it on again. If the sensor's light blinks constantly (each second during one minute), it means that the sensor is not registered. The light blinks in the same way if the sensor is deleted from the registration list. Non-registered sensor blinks also throughout 3 seconds during each activation.

4.2 Having registered the sensor successfully, select an appropriate location to install it.

### ▲ ATTENTION!

Make sure that in the installation location sensor has a stable radio contact with the receiver! A maximum distance of 2000 m (6562 ft) between the sensor and the central unit is mentioned as a comparison with other devices. This distance was found as a result of open area tests. Connection quality and distance between the sensor and the receiver can vary depending on installation location, walls, compartments, bridgings, as well as the thickness and constructional material. Signal coming through obstacles, loses power. For example, distance range between the sensor and receiver, divided with two reinforced concrete bearing walls, constitutes approximately 30 m (98.4 ft). Please note that moving the sensor alongside the doors even 10 cm (4 in), it is possible to improve the signal reception considerably.

Make sure to check the signal strength! It is possible to launch a signal level test on the receiver's side. Test launching is described in the receiver's manual.

### ▲ ATTENTION!

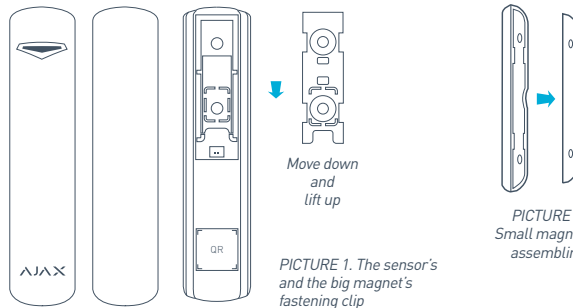
Signal level test and detection zone test for sensors take some time to start. A certain period of time is necessary for the receiver to send a test request to the sensor, and for the sensor to send a test response.

RECEIVER	SENSOR'S LIGHT EMITTING DIODE	DESCRIPTION
3 indication bars	lights almost permanently, with short breaks each 1.5 seconds	excellent signal
2 indication bars	blinks 5 times per second	medium signal
1 indication bar	blinks twice per second	low signal
0 bars	short flashes each 1.5 seconds	no signal

## 5. INSTALLATION

5.1 In order to assemble the sensor and the big magnet, lift up the plastic SmartBracket panel with your finger (PICTURE 1), move it alongside the frame and remove it.

In order to assemble the small magnet, take its fastening clip out of the frame lifting it up with a screwdriver (PICTURE 2).

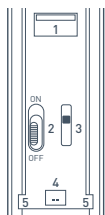


5.2 Install the fastening clip SmartBracket on the door frame and door or window frame and window with a help of the expansion bolts and self-tapping screws included in the set.  
 5.3 Put the sensor on the SmartBracket. Once the sensor is fixed on the SmartBracket, its light must blink. It means that the tamper on the sensor is shut. In case the sensor does not blink, the tamper status must be checked at the receiver configuration software!

#### ▲ ATTENTION!

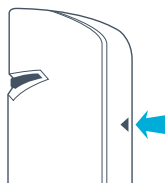
Small magnet fits better for the installing when the door shut and the door jamb are perpendicular. Big magnet fits better for the installing with the door shut and the door jamb to be in a single plane. Be careful while installing the assembling clip. Overexertion while installing can cause deformation and, as a result, impossibility to install the sensor or to its unreliable fastening. The main body of the sensor is to be installed on the fixed part of door frame or window frame, and the magnet is to be installed on the moving part of the door or window. The magnet is to be located in parallel with the sensor's main body and opposite to the special sign (triangle) on it (PICTURE 4). Fix the SmartBracket with the set's assembling units only! Other fixing system use, for example, self-tapping screws of big diameter, can damage fastening clip. Together with self-tapping screws, there is a double stick tape in the set. It can be used for temporary sensor fixing only. It is recommended not to use the tape for the permanent fixing, as the tape is drying up over a time and the sensor may fall down which can cause alarm actuation.

5.4 The opening detection sensor is installed!  
 5.5 In order to connect an additional wire sensor, plug in its wire to the socket "4" (PICTURE 3) on the sensor, and pass the wire through the sensor's opening having removed the cover "5" (PICTURE 3) from the sensor.



PICTURE 3.  
The sensor's back cover

- 1 - Front cover trigger
- 2 - Cut-off switch
- 3 - Tamper button
- 4 - Socket for wire sensors
- 5 - Cover on the sensor for the wire sensors' wires



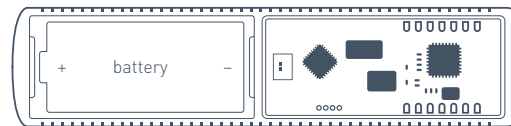
PICTURE 4.  
Triangle detecting the sealed contact

5.6 The longer the wire of the removable sensor is, the bigger are the risks of its accidental damage and the lower is the coverage quality. The distance suggested between the removable sensor and the wireless sensor Ajax is no more than 1 m (3.3 ft)

## 6. MAINTENANCE

- 6.1 Maintenance is done once every 6 months. The sensor's board must be cleared of dust, spider web, and other impurities.
- 6.2 Never rub the sensor with substances containing alcohol, acetone, petrol and other active solvents.
- 6.3 Replace the batteries up to date. If the battery level is low, the sensor sends an appropri-

ate signal to the alarm system receiver unit. When the battery has run down, with detection, including the tamper triggering, the sensor together with a usual indication turns on its light and turns it off placidly. In order to replace the battery, lift up the trigger "1" (PICTURE 3) and remove the sensor's front cover. Replace the «battery» (PICTURE 5) with a new one, type CR123A.



PICTURE 5. The sensor with the back cover removed.

#### ▲ ATTENTION!

The sensor's autonomous work duration depends on the sensor's triggering frequency and the battery quality. With door opening 10 times per day and the 60 seconds of sampling time, the battery life is 7 years. With door opening 60 times per hour and 12 seconds of polling period, the battery life of the new battery is approximately 2 years.

## 7. WARRANTY

7.1 The sensor's warranty period is 24 months. The warranty does not cover the battery!

## 8. VIDEO GUIDE

8.1 A detailed video guide for Ajax DoorProtect sensor assembling and assessing is available online on our website.